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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,568

08/22/2006

Ryoji Nomura

0553-0510

8574

26568

7590

08/26/2009

COOK ALEX LTD

SUITE 2850

200 WEST ADAMS STREET

CHICAGO, IL 60606

EXAMINER

GARRETT, DAWN L

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

08/26/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/590,568	NOMURA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Dawn Garrett	1794	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office action is responsive to the amendment received June 18, 2009. Claims 1 and 4 were amended. Claims 7 and 8 were added. Claims 1-8 are pending.
2. The amendment to the title to correct a typographical error is acknowledged.
3. The deletion of page "9/9" of the drawings is acknowledged. The previous objection to the drawing is withdrawn.
4. The objections to claims 1 and 4 set forth in the last Office action (mailed March 20, 2009) are withdrawn due to the amendment.
5. The rejection of claims 1-6 under 35 U.S.C. 102(e) as being anticipated by Nomura et al. (US 2005/0225236 A1) is withdrawn.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nomura et al. (US 2005/0225236 A1).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention “by another”; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Nomura et al. sets forth compounds according to formula (1), which is overlapping with instant formula (1), as a material for a light emitting element (see abstract). Fig. 1 shows a device having the triazine compound in layer 102 adjacent electrode layers 103 and 102 (see Fig. 1 and par. 61-62 and 66). Par. 64 discloses layer 102 comprises the luminescent material and further includes a layer of material including metal oxides which include molybdenum oxide, vanadium oxide, ruthenium oxide, tungsten oxide, and manganese oxide (see par. 64-66, page 11, page 10, par. 62 and page 21, claim 25). An element embodiment emitting blue light is disclosed per claims 3 and 6 (see page 10, par. 58). Further layers are included in the device per

claims 4 and 8 (see Examples and par. 72-77). Regarding a semiconductor layer of claim 4, Nomura et al. discloses a semiconductor layer as part of the transistor (see par. 85-89).

Regarding claim 7, Fig. 1 shows a device having the triazine compound in layer 102 adjacent electrode layers 103 and 102 (see Fig. 1 and par. 61-62 and 66). Par. 64 discloses layer 102 comprises the luminescent material and further includes a layer of material including metal oxides.

Nomura et al. does not appear to set forth an *example* comprising the triazine with the metal oxide, however as discussed above, Nomura et al. sets forth forming an embodiment wherein the triazine is included with the luminescent material and the layer comprising the luminescent material further includes a layer of metal oxide. It would have been obvious to one of ordinary skill in the art at the time of the invention to have formed a device comprising the triazine and the metal oxide in combination within a layer as taught by Nomura et al., because one would expect to achieve a functional light emitting device within the scope of the disclosure of Nomura et al.

### ***Response to Arguments***

8. Applicant's arguments filed June 18, 2009 have been fully considered but they are not persuasive.

Applicant argues with regard to the rejection over Nomura et al. (US 2005/0225236) that claim 1 has now been amended to recite the feature of “a layer between the pair of electrodes, the layer containing both a metal oxide and a triazine derivative.” Applicant argues the triazine derivative and metal oxide are mixed in a layer. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the feature upon

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which applicant relies (i.e., a mixture of triazine and metal oxide) is not expressly recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The examiner submits Nomura et al. clearly discloses the triazine material may preferably be included in the layer with the luminescent material (see par. 66) and also the layer containing the luminescent material further includes a layer including a material such as metal oxides (par. 64). Accordingly, while Nomura et al. does not expressly disclose a *mixture* of triazine compound and metal oxide (which is not required by the claims), Nomura et al. clearly discloses it is preferable to combine a metal oxide in the layer comprising the triazine material.

Applicant is further advised that if the claims are amended to expressly recite a mixture, such claims would be considered obvious in the absence of unexpected results. It is well established in the electroluminescent device art to combine functional layers. See for example Young et al. US 6,720,090, col. 3, lines 22-33 or Funhoff et al. US 5,518,824, col. 1, lines 18-32.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (571) 272-1523. The examiner can normally be reached Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dawn Garrett/  
Primary Examiner, Art Unit 1794

August 25, 2009